

REDLINE VERSION



Optical fibres – Part 1-32: Measurement methods and test procedures – Coating strippability

INTERNATIONAL
ELECTROTECHNICAL
COMMISSION

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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRES –

Part 1-32: Measurement methods and test procedures – Coating strippability

FOREWORD

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This Redline version provides you with a quick and easy way to compare all the changes between this standard and its previous edition. A vertical bar appears in the margin wherever a change has been made. Additions are in green text, deletions are in strikethrough red text.

International Standard IEC 60793-1-32 has been prepared by subcommittee 86A: Fibres and cables, of IEC technical committee 86: Fibre optics.

This third edition cancels and replaces the second edition published in 2010. This edition constitutes a technical revision.

This edition includes the following significant technical change with respect to the previous edition: expansion of the range of coating dimensions applicable to the procedure detailed in this document to accommodate optical fibres with a 200 µm coating dimension.

The text of this International Standard is based on the following documents:

FDIS	Report on voting
86A/1890/FDIS	86A/1899/RVD

Full information on the voting for the approval of this International Standard can be found in the report on voting indicated in the above table.

This document has been drafted in accordance with the ISO/IEC Directives, Part 2.

A list of all parts in the IEC 60793 series, published under the general title *Optical fibres*, can be found on the IEC website.

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OPTICAL FIBRES –

Part 1-32: Measurement methods and test procedures – Coating strippability

1 Scope

This part of IEC 60793 is intended primarily for testing either fibres as produced by a fibre manufacturer or subsequently overcoated (tight buffered) using various polymers. The test can be performed either on fibres as produced, or after exposure to various environments.

This test applies to A1, A2, A3, B and C fibres with a nominal glass dimension of 125 µm.

The object of this document is to establish uniform requirements for the mechanical characteristic – coating strippability. This test quantifies the force required to mechanically remove the protective coating from optical fibres along their longitudinal axis.

This test is not intended as a means to maximize fibre strength after the coating is removed nor is it intended to specify the best conditions for field stripping of optical fibres.

This test is designed for optical fibres having polymeric coatings with nominal outer diameters in the range of 200 µm to 900 µm. ~~Application of this method to fibres with outer coating diameters outside the range of 230 µm to 930 µm is not recommended.~~

~~Warning – Fibres can fracture while being stripped and pierce skin and eyes. Use of protective eyewear is recommended.~~

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

~~IEC 60793-1 (all parts), Optical fibres – Measurement methods and test procedures~~

IEC 60793-1-1, *Optical fibres – Part 1-1: Measurement methods and test procedures – General and guidance*

3 Terms and definitions

No terms and definitions are listed in this document.

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INTERNATIONAL STANDARD

NORME INTERNATIONALE



**Optical fibres –
Part 1-32: Measurement methods and test procedures – Coating strippability**

**Fibres optiques –
Partie 1-32: Méthodes de mesure et procédures d'essai – Dénudabilité du
revêtement**



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INTERNATIONAL ELECTROTECHNICAL COMMISSION

OPTICAL FIBRES –

Part 1-32: Measurement methods and test procedures – Coating strippability

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COMMISSION ÉLECTROTECHNIQUE INTERNATIONALE

FIBRES OPTIQUES –

Partie 1-32: Méthodes de mesure et procédures d'essai – Dénudabilité du revêtement

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La Norme internationale IEC 60793-1-32 a été établie par le sous-comité 86A: Fibres et câbles, du comité d'études 86 de l'IEC: Fibres optiques.

Cette troisième édition annule et remplace la deuxième édition parue en 2010. Cette édition constitue une révision technique.

Cette édition inclut la modification technique majeure suivante par rapport à l'édition précédente: élargissement de la plage des dimensions de revêtement applicables au mode opératoire présenté dans le présent document pour correspondre aux fibres optiques disposant d'une dimension de revêtement de 200 µm.

Le texte de cette Norme internationale est issu des documents suivants:

FDIS	Rapport de vote
86A/1890/FDIS	86A/1899/RVD

Le rapport de vote indiqué dans le tableau ci-dessus donne toute information sur le vote ayant abouti à l'approbation de cette Norme internationale.

Ce document a été rédigé selon les Directives ISO/IEC, Partie 2.

Une liste de toutes les parties de la série IEC 60793, publiées sous le titre général *Fibres optiques*, peut être consultée sur le site web de l'IEC.

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FIBRES OPTIQUES –

Partie 1-32: Méthodes de mesure et procédures d'essai – Dénudabilité du revêtement

1 Domaine d'application

La présente partie de l'IEC 60793 est destinée principalement aux essais des fibres, dès leur production par un fabricant de fibres, ou après revêtement ultérieur (revêtement protecteur serré) au moyen de divers polymères. L'essai peut être effectué sur des fibres issues de production, ou bien après exposition à divers environnements.

Le présent essai s'applique aux fibres de types A1, A2, A3, B et C avec une dimension de verre nominale de 125 µm.

L'objet du présent document est d'établir des exigences uniformes pour la caractéristique mécanique: dénudabilité du revêtement. Le présent essai permet de quantifier la force exigée pour retirer mécaniquement le revêtement de protection des fibres optiques le long de leur axe longitudinal.

Cet essai n'est pas destiné à augmenter au maximum la résistance de la fibre après retrait du revêtement de protection, ni à spécifier les meilleures conditions pour le dénudage sur site de fibres optiques.

Cet essai est conçu pour les fibres optiques ayant des revêtements polymères avec des diamètres extérieurs nominaux se situant dans la plage comprise entre 200 µm et 900 µm.

2 Références normatives

Les documents suivants cités dans le texte constituent, pour tout ou partie de leur contenu, des exigences du présent document. Pour les références datées, seule l'édition citée s'applique. Pour les références non datées, la dernière édition du document de référence s'applique (y compris les éventuels amendements).

IEC 60793-1-1, *Optical fibres – Part 1-1: Measurement methods and test procedures – General and guidance* (disponible en anglais seulement)

3 Termes et définitions

Aucun terme n'est défini dans le présent document.

L'ISO et l'IEC tiennent à jour des bases de données terminologiques destinées à être utilisées en normalisation, consultables aux adresses suivantes:

- IEC Electropedia: disponible à l'adresse <http://www.electropedia.org/>
- ISO Online browsing platform: disponible à l'adresse <http://www.iso.org/obp>